

CLAIMS

What is claimed is:

1. A piercing nozzle comprising:

5 a first elongated, hollow member having first and second ends, the second end comprising a hose connector;

a second elongated, hollow member having first and second ends, wherein the first end of the second member is connected to the first end of the first member at a connection that allows fluid to be communicated from the first member to the second member, and wherein the second member defines a plurality of holes proximate the
10 second end of the second member;

an anvil connected to the second member proximate the first end of the second member; and

a piercing tip connected to the second end of the second member.

2. The nozzle of claim 1, wherein the second member is connected to the
15 first member at a 90-degree angle.

3. The nozzle of claim 1, wherein the first and second members are formed from 1.5-inch diameter steel tubing.

4. The nozzle of claim 3, wherein the tubing is .120 inches thick.

5. The nozzle of claim 1, wherein the anvil portion and the tip are formed
20 from hardened steel.

6. The nozzle of claim 1, further comprising a hand guard connected to the first member.

7. The nozzle of claim 6, further comprising a means for allowing the first member to be gripped by a person's hand, said means being guarded by the hand guard.

8. The nozzle of claim 6, wherein the hand guard has first and second ends each connected to the first member, and wherein the hand guard and the first member define a plane, and further comprising a ridge connected to the first member, wherein the ridge runs along the first member between the first and second ends of the hand guard, within the plane, and serves as a hand grip.

9. The nozzle of claim 1, wherein the first elongated member has a length in the range of 24-48 inches, and wherein the second elongated member has a length in the range of 18-36 inches.

10. The nozzle of claim 1, wherein the first elongated member is 36 inches in length.

11. The nozzle of claim 1, further comprising a stop connected to the second elongated member.

12. The nozzle of claim 11, wherein the stop is a metal plate that is wider than the second elongated member and is connected to the second elongated member between the first and second ends.

13. The nozzle of claim 11, wherein the stop is connected to the second member at a distance of 12-20 inches from a sharpened end of the piercing tip.

14. The nozzle of claim 1, wherein the first and second elongated members are formed from a single piece of steel tubing having a curved portion that forms the connection.

15. The nozzle of claim 1, wherein the tip comprises a fixed portion that is fixedly connected to the second end of the second member and a piercing portion that

removably connects to the fixed portion, wherein the fixed portion and the piercing portion are formed from hardened steel.

16. The nozzle of claim 1, wherein the anvil comprises a fixed portion that is fixedly connected to the first end of the second member and a striking portion that removably connects to the fixed portion of the anvil, and wherein the fixed portion of the anvil and the striking portion are formed from hardened steel and are coaxial with the second elongated member.

17. The nozzle of claim 1, wherein the tip has a sharpened end that forms an angle in the range of 10-30 degrees.

18. The nozzle of claim 1, wherein the tip has a sharpened end that forms a 20-degree angle.

19. The nozzle of claim 1, wherein the holes are formed in a sidewall of the second elongated member and direct water outward from a longitudinal axis of the second elongated member.

20. The nozzle of claim 19, wherein the holes are formed in a groove running around a circumference of the second elongated member.

21. The nozzle of claim 20, wherein the holes are spaced within the groove in pairs, wherein each of the holes is set at an angle relative to a longitudinal axis of the second elongated member such that a first hole in one of the pairs directs water toward water exiting a second hole in one of the pairs.

22. The nozzle of claim 20, wherein the holes are spaced within the groove in pairs and are aligned at 45-degree angles relative to a longitudinal axis of the second elongated member.

23. The nozzle of claim 1, wherein the holes are formed in a plurality of grooves running around the second elongated member, wherein the holes in a first groove are offset relative to holes in an adjacent second groove.

24. The nozzle of claim 1, further comprising a handle connected to the first elongated member and to the anvil.

25. A piercing hose nozzle comprising:

first and second rigid, elongated members connected at a connection, wherein the second member defines a plurality of holes in a sidewall of the second member, wherein the holes are positioned circumferentially around the second member near an end of the second member;

a piercing tip connected to the end of the second member; and

a hose connection that provides fluid to the holes.

26. The nozzle of claim 25, further comprising a stop positioned between the holes and the connection between the first and second members.

27. The nozzle of claim 25, further comprising an anvil connected to the second member.

28. The nozzle of claim 25, wherein the hose connection is positioned at an end of the first member and wherein the first and second members are hollow and communicate fluid through an interior cavity from the hose connection to the holes.

29. The nozzle of claim 25, wherein the hose connection is positioned in the second member proximate the connection between the first and second members.

30. The nozzle of claim 25, wherein the second member is cylindrical.

31. An apparatus comprising:

a first rigid, hollow member having first and second ends;

a second rigid, hollow member having first and second ends, wherein the first end
of the second member is connected to the first end of the first member at a connection
that communicates fluid between the first and second members through interior cavities
defined in the first and second members, and wherein the second member has a plurality
of holes defined in a sidewall of the second member, wherein the holes are distributed
around a circumference of the second member and direct fluid out of the interior cavity of
the second member outward from a longitudinal axis at the second member;

a stop connected to the second member between the first end and the holes,
wherein the stop is formed from a metal plate that is wider than the second member;

an anvil connected at the first end of the second member proximate the
connection, wherein the anvil is coaxial with the second member; and

a piercing tip connected to the second end of the second member.

32. A piercing nozzle that attaches to a hose, comprising;

means for piercing a first side of a wall;

means for dispersing a fluid to a second side of the wall;

means connecting to a hose containing the fluid;

means for communicating the fluid from the means for connecting to the means
for dispersing;

means for urging the means for piercing through the wall to the second side after
the means for piercing has initially pierced the wall, while the means for piercing is
positioned in the wall; and

means for limiting distance by which the means for piercing passes through the wall.

33. The nozzle of claim 32, wherein the means for dispersing comprises means for dispersing the fluid radially outward from the means for piercing.